

**Wetland Restoration on Clear Creek
Utilizing Dredged Material from
the Webster Electric Generating Station**

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The Beneficial Use of Dredged Material for Wetland Restoration and Enhancement on Clear Creek

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Approximately 12 acres of intertidal wetlands were constructed and 3.1 acres of wetlands enhanced along Clear Creek using dredged material from Houston Lighting & Power Company's (HL&P) Webster Electric Generating Station in Webster, Texas. Funding for the project was provided by the Galveston Bay Estuary Program (\$145,000) and HL&P (\$62,000). The project was a partnership of a host of entities, including the Galveston Bay Estuary Program, HL&P, the Natural Resources Conservation Service, U.S. Fish & Wildlife Service, Waste Reduction Services and Padgett Shoreline, Incorporated.

Original plans called for an 18 acre restoration effort within an area impacted by subsidence, but the U.S. Army Corps of Engineers permit restrictions resulted in a 3 acre reduction to the project. A 2600 ft. Containment levee with two water control structures was constructed during the Fall of 1997. The intake canal of the Webster Station was dredged during December 1997, resulting in approximately 25,000 cubic yards of dredged material being pumped to the project site. Seeding the area with smooth cordgrass (*Spartina alterniflora*) was accomplished on February 24, 1998. In March, the outside portion of the levee was planted with smooth cordgrass transplants on one foot centers and brush fence construction was initiated. By July 1998, the site exceeded the objective of one smooth cordgrass plant per square meter. Smooth cordgrass currently dominates a significant portion of the site, providing habitat for a variety of marine and avian species. A 10' X 30' elevated observation platform was constructed along the project site in September 1998.

Utilizing dredged material for wetland construction proved to be a cost effective way to manage dredged material while restoring valuable wetland habitats. Industries or private land owners planning future dredging projects along coastal areas should strongly consider employing the successful strategies demonstrated in this beneficial uses project.